

REMARKS

Claims 1-30 are pending in the application.

Claims 1-3, 6-9, 15-18, 21-26, 29 and 30 were rejected.

Claims 4, 5, 10-14, 19, 20, 27 and 28 were objected to.

Claims 1, 15, and 30 are amended.

Claims 2, 4, 5, 10-12, 14, 17, 19, 20, 27 and 29 are provisionally amended. In the event that claims 1 and 15 are allowed, as Applicants believe appropriate, Applicants request that these amendments not be entered. Also, Applicants believe claims 2 and 17 are separately allowable even if claims 1 and 15 are not allowed.

CLAIM REJECTIONS – 35 U.S.C. § 102

Claims 1, 15 (1, 2) [meaning current claims 14 and 15], 16, and 29-30 were rejected under 35 U.S.C. 102(b) as being anticipated by Gerbasi et al. (5,597,419). In response, claims 1, 15, and 30 have been amended to import into the claims limitations from the preamble that the rotating bar is a flicker bar. This clarification makes clear that the present invention relates to flicker bars rather than detoning rolls. In Gerbasi, rotating roll 120 shown in Figures 1, 2, and 15 are specified as a detoning roll. See, e.g., column 5, line 18. Claims 2-3, 6-9, 17-18, and 21-26 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gerbasi et al.

At column 6, lines 20-21, Gerbasi clearly distinguishes between flicker bars (the subject of the present invention) and detoning rolls (shown in Figures 1 and 2 of Gerbasi). The difference is critical, since the function of detoning rolls is to impart an opposite charge to a brush or other member in order to overcome charges holding toner and debris on the brush and to attract such toner and debris to the detoning bar using electrostatic forces. In order to perform such function, detoning rolls are normally rotated such that freshly charged areas of the detoning roll are continuously exposed to the brush being cleaned. In contrast, flicker bars clean

brush fibers by causing fibers to bend until released from the bar during brush rotation, thereby mechanically “flicking” debris clear of the brush. As such, conventional flicker bars are fixedly mounted and are often not round.

The detoning roll of Gerbasi serves a different function and operates in a manner different than flicker bars. Accordingly, Gerbasi does not teach, disclose, or imply a rotating flicker bar by showing rotating detoning rolls. Gerbasi therefore cannot support a rejection of claims 1, 15, and 30. Claims 1, 15, and 30 and are accordingly allowable. Claims dependent, directly and indirectly, from claims 1, 15, and 30 are also accordingly allowable.

Additionally, with respect to claims 14 and 29, Applicants note that Gerbasi and its detoning rolls teach a cleaning method for the top side of an imaging endless web. As explained in the specification at page 2, paragraph [0004], backside cleaning of an endless web has not been necessary until newer hybrid scavengeless development and hybrid jumping development systems. Nothing in Gerbasi teaches, discloses or implies an apparatus or method for cleaning the backside of such an endless loop. Accordingly, claims 14 and 29 are allowable over Gerbasi for additional reasons.

CLAIM REJECTIONS – 35 U.S.C. § 103(a)

Claims 2-3, 6-9, 17-18, and 21-26 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gerbasi et al. In response, claims 2 and 17 have been provisionally amended into independent form. The Office Action acknowledges that Gerbasi fails to teach drive coupling of the brush and the flicker bar. Its rejection is based upon “official notice that it is well known in the art to drive one member with the other.” A 1.132 Affidavit from Steven J. Fiore is submitted herewith confirming that drive coupling of brushes and flicker bars is novel. This aspect of the present invention was invented, in part, to minimize space required by an apparatus mounted in the backside, interior of an imaging endless loop. Accordingly, claims 2, 3, 17, and 18 are non-obvious over Gerbasi and are in condition for allowance.

With respect to the rotational speeds claimed on claims 6-9 and 21-24, the Office Action explains its rejection by stating that “it would have been obvious to one having ordinary skill in the art at the time the invention was made to select the appropriate speed for the flicker bar and brush...”. Such a general statement ignores statements of the specification such as paragraph 0021, lines 2-4, which note that the brush of this aspect of the present system rotates “approximately an order of magnitude less than the rotational speed of conventional brushes used to clean imaging surfaces.” See also paragraph 0018, lines 5-8. Accordingly, selection of rotational speed for this aspect of the present invention substantially differs from conventional rotational speeds and is NOT obvious. Claims 6-9 and 21-24 are, accordingly, separately allowable over any rejection based upon 35 U.S.C. § 103.

In sum, claims 1, 15, and 30 are amended and are believed in condition for allowance. All other claims depend these claims and are accordingly also allowable. Claims 14 and 29, claiming back-of-the-belt cleaner systems, are separately allowable. Claims 2 and 17 are provisionally amended and set forth their own bases for allowability. Claims 6-9 and 21-29 also have separate basis for allowance. In response to objections, claims that would be allowable if rewritten in independent form from such a claim are provisionally amended. All claims are accordingly believed in condition for allowance.

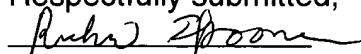
ALLOWABLE SUBJECT MATTER

Claims 4-5, 10-14, 19-20, and 27-28 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, claims 4 and 19 have been provisionally amended into independent form, and each of the other objected to claims have been amended to depend from either claims 4 and 19. Each is, accordingly, now in allowable condition.

Application No. 10/672,860

In the event the Examiner considers personal contact advantageous to the disposition of this case, the Examiner is hereby authorized to call Applicant's Attorney, Richard Spooner, at Telephone Number (585) 423-5324, Rochester, New York.

Respectfully submitted,



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IN THE DRAWINGS:

The drawings were objected to under 37 CFR (1.83(a). Amended claim 14 and claim 29 are the relevant claims since these are the claims that place the invention apparatus in interfering relationship to the backside of an endless loop. In response to the objection to the drawings. Figure 1 has been amended to relabel "Bottom layer" as "Backside". Accordingly, applicants believe that the objection to the drawings has been satisfied.

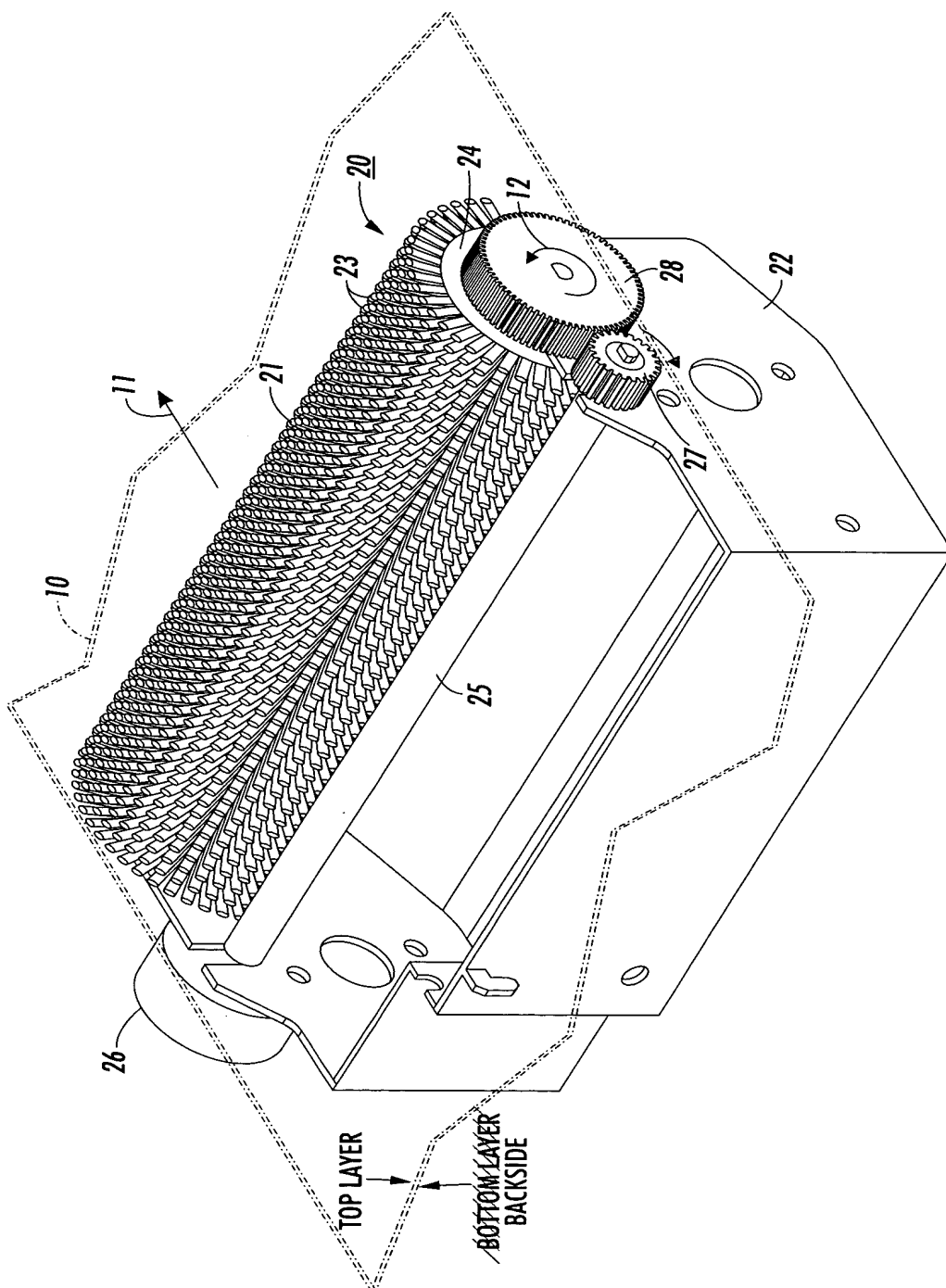


FIG. 1



FIG. 2

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Formal Drawings for
Attorney: **Richard F. Spooner**

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2 Sheets / 2 Figures

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